

WHAT IS CLAIMED IS:

1. An H-bridge driver for driving an electrical load; said H-bridge driver comprising first and second high side MOSFETs and first and second low side MOSFETs; each of said MOSFETs having respective drain, source and control electrodes; the drain electrodes of said high side MOSFETs and the source electrodes of said low side MOSFETs connected to power input terminals; the source electrodes of said first and second high side MOSFETs connected to the drain electrodes of said first and second low side electrodes respectively at first and second nodes which define output bridge terminals; a control IC for controlling the operation of said high side and low side MOSFETs; said control IC having input terminals connectable to receive input control signals from an exterior bridge control circuit and having output terminals connected to said control electrodes of said high side MOSFETs; a conductive support plate for supporting said first and second high side MOSFETs and said IC; and a common insulation housing enclosing said first and second high side MOSFETs and said IC; and connection pins extending from said housing.

2. The H-bridge driver of claim 1, wherein said IC includes low side driver circuits for driving said low side MOSFETs; said driver circuits housed in separate respective discrete packages.

3. The H-bridge driver of claim 1, wherein said IC includes low side driver circuits for driving said low side MOSFETs in accordance with the conduction condition of said first and second high side MOSFETs; and first and second low side connection pins extending through said housing from said low side driver for connection to said control electrodes of said low side MOSFETs.

4. The H-bridge driver of claim 1, wherein said load is a motor connected to said first and second nodes.

5. The H-bridge driver of claim 1, wherein said connection pins include IN1 and IN2 pins coupled to the respective control electrodes of said first and second high side MOSFETs, a V_{cc} pin and a GND pin connected to said power input terminals, and M1 and M2 pins connected to said first and second nodes respectively.

6. The H-bridge driver of claim 5, wherein said IC includes low side driver circuits for driving said low side MOSFETs in accordance with the conduction of said first and second high side MOSFETs; and first and second low side connection pins extending through said housing from said low side driver for connection to said control electrodes of said low side MOSFETs.

7. The H-bridge driver of claim 1, wherein said first and second low side MOSFETs are mounted atop said first and second high side MOSFETs respectively, and wherein said low side MOSFETs are contained within said housing.

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